WHAT IS CLAIMED IS:

1. A method of modulating tumor growth comprising contacting a tumor cell with an effective amount of an agonist or antagonist of IL-23.

2. The method of Claim 1, wherein the antagonist of IL-23 inhibits or prevents tumor growth.

3. The method of Claim 1, wherein the tumor cell expresses IL-23.

4. The method of Claim 1, wherein the agonist or antagonist of IL-23 comprises a binding composition that specifically binds a polypeptide or nucleic acid of:

a) p19 (SEQ ID NOs:1, 2, 3, or 4); or

b) IL-23R (SEQ ID NOs:5 or 6).

5. The method of Claim 4, wherein the binding composition comprises:

a) an antigen-binding site of an antibody;

b) an extracellular region of IL-23R (SEQ ID NOs:5 or 6);

c) a small molecule;

d) an anti-sense nucleic acid or small interference RNA (siRNA); or

e) a detectable label.

6. The method of Claim 4, wherein the binding composition comprises:

a) a polyclonal antibody;

b) a monoclonal antibody;

c) a humanized antibody, or a fragment thereof;

d) an Fab, Fv, or $F(ab')_2$ fragment; or

e) a peptide mimetic of an antibody.

7. The method of Claim 1, wherein the tumor cell is:

a) a colon cancer cell;

b) an ovarian cancer cell;

c) a breast cancer cell; or

d) a melanoma cell.

8. A method of treating a subject suffering from a cancer or tumor comprising administering to the subject an effective amount of an agonist or antagonist of IL-23.

9. The method of Claim 8, wherein the antagonist of IL-23 inhibits:

a) growth of the cancer or tumor;

b) cachexia;

c) anorexia; or

d) angiogenesis.

10. The method of Claim 8, wherein the antagonist of IL-23 comprises a binding composition that specifically binds a polypeptide or nucleic acid of:

a) p19 (SEQ ID NOs:1, 2, 3, or 4); or

b) IL-23R (SEQ ID NOs:5 or 6).

11. The method of Claim 10, wherein the binding composition comprises:

a) an antigen-binding site of an antibody;

b) an extracellular region of IL-23R (SEQ ID NOs:5 or 6);

c) an anti-sense nucleic acid or small interference RNA (siRNA);

d) a small molecule; or

e) a detectable label.

12. The method of Claim 10, wherein the binding composition comprises:

a) a polyclonal antibody;

b) a monoclonal antibody;

c) a humanized antibody, or a fragment thereof;

d) an Fab, Fv, or $F(ab')_2$ fragment; or

e) a peptide mimetic of an antibody.

13. The method of Claim 8, wherein the cancer or tumor is of the:

a) gastrointestinal tract;

b) respiratory tract;

c) reproductive system; or

d) endocrine system.

14. The method of Claim 8, wherein the cancer or tumor is:

a) colon cancer;

b) ovarian cancer;

c) a melanoma; or

d) breast cancer.

15. A method of diagnosis of a cancer or tumor comprising contacting a sample from a subject with the binding composition of the method of Claim 10.

16. The method of Claim 15, wherein the binding composition comprises a nucleic acid probe or primer that specifically binds or hybridizes to the polynucleotide of SEQ ID NOs:1, 2, or 5.

17. A kit for the diagnosis of a cancer or tumor comprising the binding composition of the method of Claim 10 and:

a) a compartment; or

b) instructions for use or disposal.

18. The kit of Claim 17, wherein the binding composition comprises an antibody that specifically binds to:

a) p19 (SEQ ID NOs:1, 2, 3, or 4); or

b) IL-23R (SEQ ID NOs:5 or 6).